



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,424	01/27/2004	Douglas F. Beaven	beaven01.002	1530

25247 7590 11/07/2005

GORDON E NELSON
PATENT ATTORNEY, PC
57 CENTRAL ST
PO BOX 782
ROWLEY, MA 01969

EXAMINER

HECK, MICHAEL C

ART UNIT	PAPER NUMBER
----------	--------------

3623

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/765,424	Applicant(s) BEAVEN ET AL	
	Examiner Michael C. Heck	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 and 30-36 is/are rejected.
- 7) ☐ Claim(s) 27-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

4

DETAILED ACTION

1. The following is a First Office Action in response to the continuation-in-part application filed 27 January 2004. Claims 1-36 are pending in this application and have been examined on the merits as discussed below.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 4007 (note: 4007 is mentioned in the description on page 42, however it is in error. Please see the objection below.), 4103, 4257, 4311, 4313, 4605, 4609, 4611, 4632, 4803 and 5201.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 412, 401(k), 5125, 2531 and 5215.

4. The drawings are objected to because

- On figure 13, delete "Status: Onot started", and insert -- Status: not started --.
- On figures 15, 16, 17, 19 and 20, the "Due" number for the goal: "Have profitable products for every segment" does not match. For example, figure 15 and 20 shows "33w" and figure 16, 17 and 19 shows "34w".
- On figure 20, the "Due" number of "16w" for the goal: "Expand Business with most profitable customers" does not match the "Due" number of "17w" for figures 16, 17 and 19.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract

Art Unit: 3623

on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The Abstract is greater than 150 words.

6. The disclosure is objected to because of the following informalities:

- Starting on page 8 to page 10, the statements made, i.e., paragraph (8) and the "bullet" statements, do not end in a period.
- On page 15, lines 5-6, delete, "profitable customers are: to deeper relationships", and insert -- profitable customers are: to **deepen** relationships --.
- On page 17, line 32, figure 36 is the wrong figure since figure 36 (on page 21, line 12) is "basic information related to the selected goal" and not a template.
- On page 20, line 12, delete "Rank: (not shown) this held", and insert -- Rank: (not shown) this **field** --.
- On page 20, lines 20-26, the Basic Goal Edit screen (figure 28) has fields that are identified, i.e. domain, status, however "benefit" is not displayed on figure 28.
- Delete page 26, lines 19-20.
- Delete page 27, line 11.
- Delete page 32, line 22.

Art Unit: 3623

- On page 33, line 3, delete "4208", and insert -- **4205** --.
- On page 35, line 5, 8, 19, 26 and 27, delete "4223" and insert -- **4233** --.
- On page 35, line 20, delete "2531" and insert -- **4239** --.
- On page 36, line 1, delete "4235", and insert -- **4253** --.
- Delete page 36, line 10.
- On page 37, line 17, delete "4617", and insert -- **4607** --.
- On page 37, line 24, delete "4604", and insert -- **4606** --.
- On page 37, line 29, delete "4625", and insert -- **4627** --.
- On page 38, lines 11 and 12, delete "5215", and insert -- **4215** --.
- On page 39, line 17, delete "4606", and insert -- **4604** --.
- Delete page 40, line 30.
- On page 41, lines 10-11, delete "/** What determines which activities are on this list? **/".
- On page 42, line 6, delete "4010", and insert -- **4008** --.
- On page 42, line 7, delete, "4007", and insert -- **4009** --.
- On page 42, line 10, delete "5007", and insert -- **5006** --.
- On page 42, lines 22 delete "4409", and insert -- **4407** --.

The above citation is a mere guide. Applicant is requested to review the specification thoroughly to eliminate additional errors.

Claim Objections

7. Claim 34 is objected to because of the following informalities: the claim appears to be incomplete. The claim stops at "according to" and does not complete the claim limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 1, 3, 4, 12-14, 17, 24, 25, 27 and 35** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the term "to perceive" or "perceive" is a relative term, which renders the claims indefinite. The term "to perceive" or "perceive" is not defined by the claims; the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention. Webster's New Collegiate Dictionary, Tenth Edition, defines "perceive": 1a: to attain awareness or understanding of b: to regard as being such, and 2: to become aware of through the senses. That is, "to perceive" or "perceive" is a variable state of mind that can only be ascertained from the perceiver, therefore is indefinite. The Examiner has interpreted "to perceive" or "perceive" to mean observe.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1-26, and 30-36** are rejected under 35 U.S.C. 102(b) as being anticipated by Knoth (Knoth, Tools for a Collaborative World, Computer-Aided Engineering, April 1997, 9.40-47 [PROQUEST]). Knoth discloses a system for performing collaborative tasks comprising:

- **[Claim 1]** a processor which has access to a representation of a model of the activity, the form of the model being defined by the collaborators and the representation providing access to information relating to the activity (Para 7-9 and 14-16, Knoth teaches holding a conference over the Internet in real time is a concept the whole design team can partake in the comfort of their own offices. With CAD conferencing software that works over the Internet, team members can see 3D designs posted and manipulated on-line in real time or by using a Web browser such as Netscape Navigator. Over the Internet, participants in the conference are supplied with various viewing and navigational tools through the simple and easy-to-use interface of the product that resembles a flight navigational panel. To start a conference, the conference coordinator executes LOOK>>IN on a UNIX workstation and loads a CAD file in a native CAD file format onto the server. As participants connect to the server, the 3D model appears on their monitors in the built-in interface of LOOK>>IN. Participants watch the changes being made as the coordinator zooms in, rotates, and sketches a markup of the model on the screen. Control of the screen can be switched between the coordinator and the participants. The concept of shared workspace has the potential to revolutionize the way design teams collaborate on projects. It creates easy and simultaneous access to a common space where multiple users are able to work on a design at the same time. A shared-workspace environment enables engineers to collaborate with each other and access a central database with information on what everyone else is doing on the project. The Examiner interprets a processor is enclosed in the computer systems used that allow access to information (CAD file) that represents the 3D design (model).).

- an interface to the system for the collaborators, the interface being provided by the processor and the interface permitting a collaborator to perceive and modify the model's form and to perceive and modify the information to which the representation of the model provide access (Para 7-9 and 14-16, Knoth teaches holding a conference over the Internet in real time is a concept the whole design team can partake in the comfort of their own offices. With CAD conferencing software that works over the Internet, team members can see 3D designs posted and manipulated on-line in real time or by using a Web browser such as Netscape Navigator. Over the Internet, participants in the conference are supplied with various viewing and navigational tools through the simple and easy-to-use interface of the product that resembles a flight navigational panel. To start a conference, the conference coordinator executes LOOK>>IN on a UNIX workstation and loads a CAD file in a native CAD file format onto the server. As participants connect to the server, the 3D model appears on their monitors in the built-in interface of LOOK>>IN. Participants watch the changes being made as the coordinator zooms in, rotates, and sketches a markup of the model on the screen. Control of the screen can be switched between the coordinator and the participants. The concept of shared workspace has the potential to revolutionize the way design teams collaborate on projects. It creates easy and simultaneous access to a common space where multiple users are able to work on a design at the same time. A shared-workspace environment enables engineers to collaborate with each other and access a central database with information on what everyone else is doing on the project. The Examiner interprets a processor is enclosed in the computer systems used that allow access to information (CAD file) that represents the 3D design (model).).
- **[Claim 2]** the representation of the model includes representations of the information (Para 9 and 14, Knoth teaches as participants connect to the server, the 3D model appears on their monitors in the built-in interface of LOOK>>IN. With this technology, multiple engineers at various locations can discuss data and alter the same CAD design through the network – either over the Internet or through an internal network – simultaneously.).
- **[Claim 3]** the interface further permits a collaborator to perceive the model as sorted according to values of the included representations of the information (Para 21, Knoth teaches through a simple graphical interface, the software prompts the user with attributes of parts that are stored in a database of classes and subclasses. As the user clicks on the appropriate attributes, the system narrows down prompts until the correct part is either selected or the user is notified that the part doesn't exist. The examiner interprets attributes to be values and the process of narrowing down to be sorting.).

Art Unit: 3623

- **[Claim 4]** the model further includes representations of further information (Para 22, Knoth teaches in addition to locating part information, the product tracks all aspects of the design process – such as file and job information, 3D previewing of IGES and STL data, and viewing of 2D information on a Whiteboard – all through the Netscape Navigator interface.); and
- the interface permits the collaborator to perceive how the further information is related to the model and to perceive the further information (Para 22, Knoth teaches in addition to locating part information, the product tracks all aspects of the design process – such as file and job information, 3D previewing of IGES and STL data, and viewing of 2D information on a Whiteboard – all through the Netscape Navigator interface. A hierarchical job tree displays the status of all jobs and files; a job log keeps track of every activity – files that were uploaded, downloaded, previewed, updated, transitions from a “new” job to “in queue,” “in process,” or “complete”; and a screen shows all the message correspondence back and forth. The examiner interprets the multi-screen display allows the collaborator to observe how the information is related.).
- **[Claim 5]** the interface further permits the collaborator to modify the further information (Para 7-8, 15-16 and 22, Knoth teaches holding a conference over the Internet in real time is a concept the whole design team can partake in the comfort of their own offices. With CAD conferencing software that works over the Internet, team members can see 3D designs posted and manipulated on-line in real time or by using a Web browser such as Netscape Navigator. Over the Internet, participants in the conference are supplied with various viewing and navigational tools through the simple and easy-to-use interface of the product that resembles a flight navigational panel. It also created easy and simultaneous access to a common space where multiple users are able to work on a design at the same time. A shared-workspace environment enables engineers to collaborate with each other and access a central database with information on what everyone else is doing on the project. A hierarchical job tree displays the status of all jobs and files; a job log keeps track of every activity – files that were uploaded, downloaded, previewed, updated, transitions from a “new” job to “in queue,” “in process,” or “complete”; and a screen shows all the message correspondence back and forth.).
- **[Claim 6]** the further information is a document that is accessible to the system (Para 22, Knoth teaches a hierarchical job tree displays the status of all jobs and files; a job log keeps track of every activity – files that were uploaded, downloaded, previewed, updated, transitions from a “new” job to “in queue,” “in process,” or “complete”; and a screen shows all the message

correspondence back and forth. The examiner interprets files to be documents.).

- **[Claim 7]** the further information is a message sent to the collaborator by another collaborator (Para 22, Knoth teaches a screen shows all the message correspondence back and forth.).
- **[Claim 8]** the further information is an alert that indicates a change in the model that is relevant to the collaborator (Para 22, Knoth teaches a hierarchical job tree displays the status of all jobs and files; a job log keeps track of every activity – files that were uploaded, downloaded, previewed, updated, transitions from a “new” job to “in queue,” “in process,” or “complete”. The examiner interprets displaying a status to be “alert”).
- **[Claim 9]** the further information is a reminder generated by the system for the collaborator (Para 21, Knoth teaches that through a simple graphical interface, the software prompts the user with attributes of parts that are stored in a database of classes and subclasses.).
- **[Claim 10]** the further information is a discussion concerning the model among the collaborators (Para 13 and 22, Knoth teaches on the screen, in separate Windows, are live video and audio pictures of all the other team members, making a truly interactive environment. Each person is assigned a unique cursor such as a star or squiggle that identifies their remarks and differentiates them for the others. A screen shows all the message correspondence back and forth.).
- **[Claim 11]** the representation of the collaborator-defined model of the activity permits the model to be viewed in a plurality of ways (Para 7-9, Knoth teaches that with CAD conferencing software that works over the Internet, team members can see 3D designs posted and manipulated on-line in real time or by using a Web browser such as Netscape Navigator. Over the Internet, participants in the conference are supplied with various viewing and navigational tools through the simple and easy-to-use interface of the product that resembles a flight navigational panel. To start a conference, the conference coordinator executes LOOK>>IN on a UNIX workstation and loads a CAD file in a native CAD file format onto the server. As participants connect to the server, the 3D model appears on their monitors in the built-in interface of LOOK>>IN. Participants watch the changes being made as the coordinator zooms in, rotates, and sketches a markup of the model on the screen.); and
- the interface permits the model to be viewed according to the plurality of ways (Para 7-9, Knoth teaches that with CAD conferencing software that works

over the Internet, team members can see 3D designs posted and manipulated on-line in real time or by using a Web browser such as Netscape Navigator. Over the Internet, participants in the conference are supplied with various viewing and navigational tools through the simple and easy-to-use interface of the product that resembles a flight navigational panel.).

- **[Claim 12]** the model includes model entities that have relationships one to another (Para 19, Knoth teaches that as you are developing a product, you can either start from the top down and lay things out and break them into their components together to create an assembly. But while you are doing that, your are doing it as a natural part of the design process on the same context as design and components, plus you are automatically capturing the relationships between those components.);
- the representation of the model includes representations of the model entities and of their relationships (Para 19, Knoth teaches that as you are developing a product, you can either start from the top down and lay things out and break them into their components together to create an assembly. But while you are doing that, your are doing it as a natural part of the design process on the same context as design and components, plus you are automatically capturing the relationships between those components.);
- access to the information is provided via the representations of the model entities (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser. Pro/WEB PUBLISH will enable users to extract information from the Pro/ENGINEER product model and distribute it, using the Web browser, throughout the entire organization. The examiner interprets extracting as having access to the information.); and
- the interface permits the collaborator to perceive the model entities and the relationships and to modify the relationships (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over

the Web or intranets with any standard browser. The figure shows and assembly and a tree hierarchy.).

- **[Claim 13]** there is a plurality of types of model entities (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser. The examiner interprets text, graphics, parts list, and instructions to be a plurality of types of model entities.);
- a representation of a model entity specifies the represented model entity's type (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser. The examiner interprets formats, i.e., HTML, VRML, CGM, and JPEG, specifies the represented model entity's type.); and
- the interface permits the collaborator to perceive the type of a model entity (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser.);
- **[Claim 14]** the relationships includes a first relationship and a second relationship, the second relationship including a model entity that also belongs to the first relationship (Para 22, Knoth teaches a hierarchical job tree displays the status of all jobs and files. The examiner interprets hierarchy to relate to relationships.); and
- the interface permits the collaborator to perceive the first relationship and/or the second relationship (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the

Art Unit: 3623

export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser. The examiner notes the figure displays a "tree" structure or hierarchy.).

- **[Claim 24]** there is a plurality of types of model entities (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser. The examiner interprets text, graphics, parts list, and instructions to be a plurality of types of model entities.);
- a representation of a model entity specifies the represented model entity's type (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser. The examiner interprets formats, i.e., HTML, VRML, CGM, and JPEG, specifies the represented model entity's type.); and
- the interface permits the collaborator to perceive the type of a model entity (p. 47 "Engineering Publishing" and Figure "Baring it all", Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser.); and
- a related representation of further information may be related to a representation of a model entity of any type (Para 22, Knoth in addition to locating part information, the product tracks tracking all aspects of the design process – such as file and job information, 3D previewing of IGES and STL

data, and viewing of 2D information on a Whiteboard – all through the Netscape Navigator interface. A hierarchical job tree displays the status of all jobs and files; a job log keeps track of every activity – files that were uploaded, downloaded, previewed, updated, transitions from a “new” job to “in queue,” “in process,” or “complete”; and a screen shows all the message correspondence back and forth. The examiner interprets the multi-screen display allows the collaborator to observe how the information is related.).

- **[Claim 25]** the collaborators have different access privileges with regard to particular ones of the model entities (Para 15, Knoth teaches controlled connections between users over the Internets and intranets. Authorization tools give certain users access to the designs and the right to read, modify, and use different parts of the product.); and
- the interface determines what a collaborator perceives of the model entities according to the collaborator's access privileges (Para 15, Knoth teaches authorization tools give certain users access to the designs and the right to read, modify, and use different parts of the product.).
- **[Claim 26]** the model includes model entities having a hierarchical relationship (p. 47 “Engineering Publishing” and Figure “Baring it all”, Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser. The examiner interprets text, graphics, parts list, and instructions to be a plurality of types of model entities. The examiner notes the figure displays a “tree” structure or hierarchy.).
- **[Claim 30]** a first window wherein the model entities and their relationships are displayed and wherefrom a collaborator may select a model entity; and a second window wherein the collaborator may perform an operation on the selected model entity, the second window being displayed simultaneously with the first window (Para 7-9, 14-16 and 22, Knoth teaches holding a conference over the Internet in real time is a concept the whole design team can partake in the comfort of their own offices. With CAD conferencing software that works over the Internet, team members can see 3D designs posted and manipulated on-line in real time or by using a Web browser such as Netscape Navigator. Over the Internet, participants in the conference are supplied with various viewing and navigational tools through the simple and easy-to-use interface of the product that resembles a flight navigational panel. To start a conference, the conference coordinator executes LOOK>>IN on a

UNIX workstation and loads a CAD file in a native CAD file format onto the server. As participants connect to the server, the 3D model appears on their monitors in the built-in interface of LOOK>>IN. Participants watch the changes being made as the coordinator zooms in, rotates, and sketches a markup of the model on the screen. Control of the screen can be switched between the coordinator and the participants. The concept of shared workspace has the potential to revolutionize the way design teams collaborate on projects. It creates easy and simultaneous access to a common space where multiple users are able to work on a design at the same time. A shared-workspace environment enables engineers to collaborate with each other and access a central database with information on what everyone else is doing on the project. Visionary Design Systems also is determined to improve communications between manufacturers and suppliers. In addition to locating part information, its product tracks all aspects of the design process – such as file and job information, 3D previewing of IGES and STL data, and viewing of 2D information on a Whiteboard – all through the Netscape Navigator interface. A hierarchical job tree displays the status of all jobs and files; a job log keeps track of every activity – files that were uploaded, downloaded, previewed, updated, transitions from a “new” job to “in queue,” “in process,” or “complete”; and a screen shows all the message correspondence back and forth.).

- **[Claim 31]** the operation is modifying the relationships of the selected model entity (Para 19, Knoth teaches that as you are developing a product, you can either start from the top down and lay things out and break them into their components together to create an assembly. But while you are doing that, your are doing it as a natural part of the design process on the same context as design and components, plus you are automatically capturing the relationships between those components. The examiner interprets that as you select components you are modifying the relationships.).
- **[Claim 32]** the operation is accessing the information via the selected model entity (p. 47 “Engineering Publishing” and Figure “Baring it all”, Knoth teaches Pro/WEB PUBLISH is a Web interface that supports the export of Pro/ENGINEER assembly process plans and assemblies to standard Web pages using HTML, VRML, CGM, and JPEG formats and Java applets. It basically takes all of the information from the drawing and automatically formats the text, graphics, parts list, and instructions required for method sheets, enabling users to view the data over the Web or intranets with any standard browser. Pro/WEB PUBLISH will enable users to extract information from the Pro/ENGINEER product model and distribute it, using the Web browser, throughout the entire organization. The examiner interprets extracting as having access to the information.).

Art Unit: 3623

- **[Claim 33]** the relationships include a plurality thereof; and the first window shows the model entities according to the plurality of relationships (Para 22, Knoth teaches in addition to locating part information, the product tracks all aspects of the design process – such as file and job information, 3D previewing of IGES and STL data, and viewing of 2D information on a Whiteboard – all through the Netscape Navigator interface. A hierarchical job tree displays the status of all jobs and files; a job log keeps track of every activity – files that were uploaded, downloaded, previewed, updated, transitions from a “new” job to “in queue,” “in process,” or “complete”; and a screen shows all the message correspondence back and forth. The examiner interprets the multi-screen display allows the collaborator to observe how the information is related.).
- **[Claim 34]** the first window permits the collaborator to select which relationship the first window shows the model according to (p. 42, “Collaborating in Virtual Space”, Knoth teaches Dual User Option lets two engineers view the same virtual model through their own individual perspectives.).
- **[Claim 36]** a third window wherein an interface to third-party software is displayed, the third window being displayed simultaneously with the first window (Para 22, Knoth teaches in addition to locating part information, the product tracks all aspects of the design process – such as file and job information, 3D previewing of IGES and STL data, and viewing of 2D information on a Whiteboard – all through the Netscape Navigator interface. A hierarchical job tree displays the status of all jobs and files; a job log keeps track of every activity – files that were uploaded, downloaded, previewed, updated, transitions from a “new” job to “in queue,” “in process,” or “complete”; and a screen shows all the message correspondence back and forth. The examiner interprets message correspondence to be third-party software that is displayed.).

Claims 15-23 and 35 substantially recite the same limitations as that of claims 2-10 and 25 with the distinction being different dependencies within the same system and an interface. Hence the same rejection for claims 2-10 and 25 as applied above applies to claims 15-23 and 35.

Allowable Subject Matter

12. **Claims 27-29** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

- Board et al. (Board et al., High-end Project Managers, InfoWorld, 1 February 1993, p.61-69 [PROQUEST]) disclose coordinating enterprise projects with desktop flexibility.
- Zimmerman (Zimmerman, Software Review-Open Plan 5.0 Upgrade, Cost Engineering, Vol. 13, Issue 12, December 1993, p.11 [PROQUEST]) discloses a new activity entry screen composed of 5 separate windows that can be sized and moved.
- Paolini (Paolini, Open Text Introduces First Application Suite for Corporate Intranets, Business Wire, 20 February 1996 [PROQUEST]) disclose tools corporations need to manage collaborative business-critical processes.
- Gervais et al. (U.S. Patent 6,381,579) disclose a system and method to provide secure navigation to resources on the Internet.

Art Unit: 3623

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael C. Heck whose telephone number is (571) 272-6730. The Examiner can normally be reached Monday thru Friday between the hours of 8:30am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 273-6729.

Any response to this action should be mailed to:

**Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450**

Or faxed to:

(571) 273-8300

[Official communications; including After Final communications labeled "**Box AF**"]

(571) 273-6730

[Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

mch
mch

28 October 2005

Susanna M. Diaz

**SUSANNA M. DIAZ
PRIMARY EXAMINER**

AU 3623